

ABSTRACT

A solid-state imaging element capable of acquiring an image signal having high resolution and a wide dynamic range is provided, while suppressing an occurrence of an artificial color and an occurrence of color moiré.

A solid-state imaging element of the present invention contains a plurality of photoelectric converting regions 111 to 157, vertical transfer portions 201 to 208, a horizontal transfer portion 300, and an output portion 400. These plural photoelectric converting regions 111 to 157 are arranged on a surface of a semiconductor substrate along a row direction (namely, direction indicated by arrow "X") and a column direction (direction indicated by arrow "Y") located perpendicular to this row direction. The photoelectric converting regions 111 to 157 are subdivided into main regions "m" having relatively wide light-receiving areas, and sub-regions "s" having relatively narrow light-receiving areas. These main areas "m" and sub-areas "s" produce signal electron charges corresponding to light having predetermined spectral sensitivities, and then store thereinto the produced signal electron charges. A partial photoelectric converting region within the photoelectric converting regions 111 to 157 corresponds to different color light with respect to the main region "m" and the sub-region "s."